MUR460C

01-Jul-2026

Superfast Recovery Rectifier

DO-214AB (SMC)

MUR460C



Cathode ⟵ **Anode**

Features

- Low forward voltage drop
- Low leakage current
- High current capability
- Super fast switching speed
- High forward surge capability
- High reliability
- Compliant with RoHS Provisions

Applications

- Fast recovery diode
- Mainly used for rectification
- Used in high-power equipment

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	MUR460C	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Average Rectified Output Current	I_o	4.0	A
Reverse Recovery Time. IF=0.5A,IR=1A,IRR=0.25A	Trr	50	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150	A
I^2t rating for fusing (8.3ms)	I^2t	93.4	A^2S
Maximum Forward Voltage at 4.0 A	V_F	1.3	V
Maximum DC Reverse Current @TA=25 °C at Rated DC Blocking Voltage @TA=125 °C	I_R	10 500	μA
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C
Typical thermal resistance (Note 1)	$R_{\theta JL}$	15	°C/W
	$R_{\theta JA}$	60	

Note: 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.

Ratings And Characteristics Curves (TA = 25 ˚C unless otherwise noted)

Fig.1 Current Derating, Case

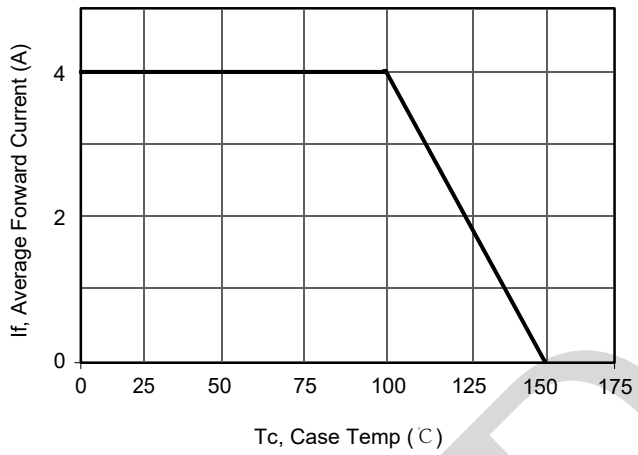


Fig.2 Maximum Non-Repetitive Peak Forward Surage Current

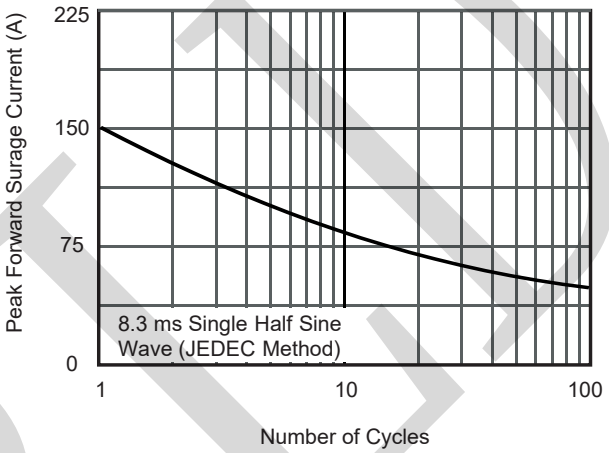


Fig.3 Typical Forward Voltage

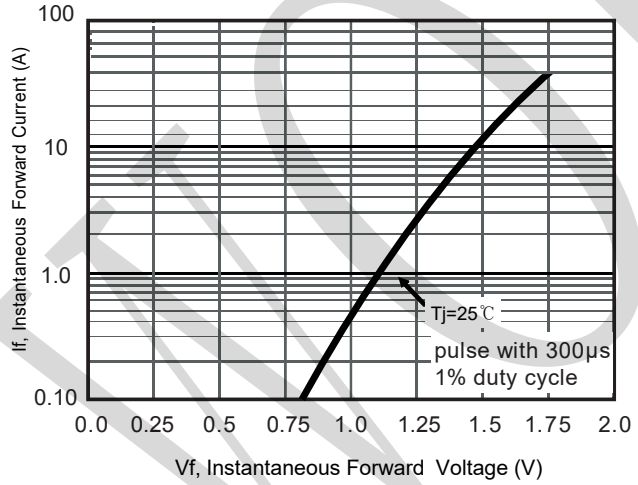
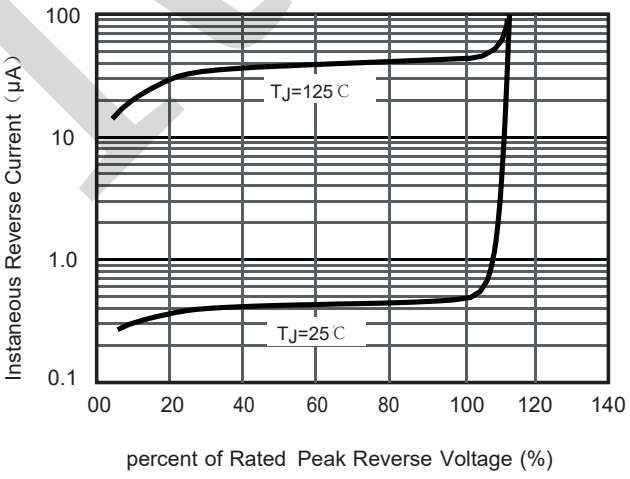
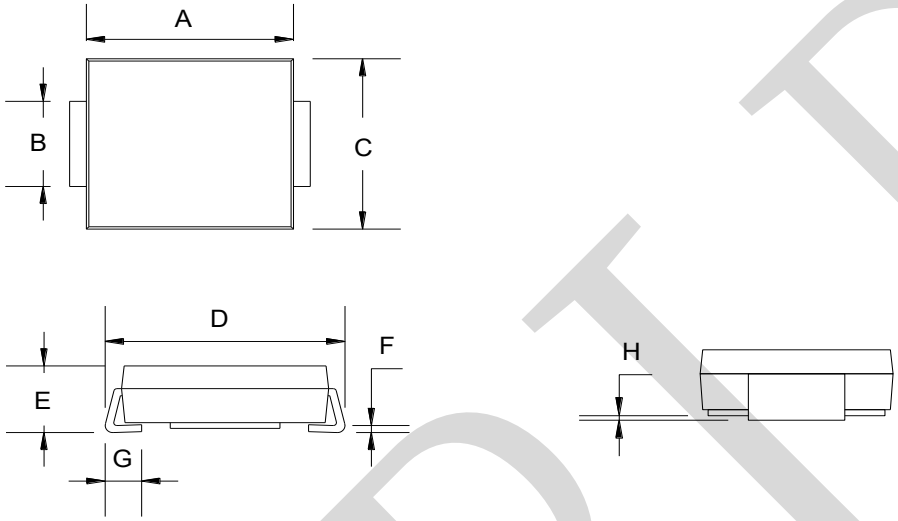


Fig.4 Typical Reverse Characteristics



PACKAGE OUTLINE DIMENSIONS

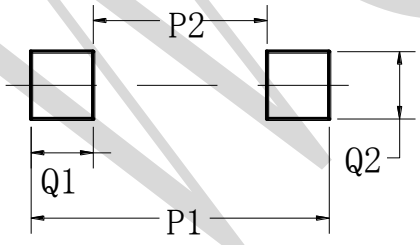
DO-214AB(SMC)



SMC Mechanical Data

UNIT		A	B	C	D	E	F	G	H
mm	max	7.1	3.3	6.25	8.1	2.6	0.30	1.5	0.2
	min	6.6	2.8	5.6	7.7	2.0	0.15	0.75	0.1
mil	max	279.5	129.9	246.1	318.9	102.3	11.8	59.1	7.87
	min	259.8	110.2	220.5	303.1	78.7	5.90	29.5	3.93

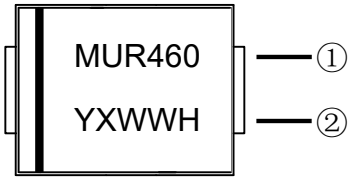
SMC Suggested Pad Layout



UNIT		P1	P2	Q1	Q2
mm	Typ	9.9	3.85	3.0	3.8
mil	Typ	389.7	151.5	118.1	149.6

WORLD

Marking Information



①Product model :MUR460

②PDC information：

Y X WW H

H::Halogen-free

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

WORLD

Revision Histor			
Date	Revision	Description & changes	Author
2017.11.23	1.0	Initial version	Sun
2018.06.03	1.1	Add printed characters	Sun
2026.07.01	1.2	Version updating	Tang

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